Title (en)

CERAMIC ELECTRONIC COMPONENT AND METHOD FOR PRODUCING CERAMIC ELECTRONIC COMPONENT

Title (de)

ELEKTRONISCHES KERAMIKBAUTEIL UND VERFAHREN ZUR HERSTELLUNG DES ELEKTRONISCHEN KERAMIKBAUTEILS

Title (fr)

COMPOSANT ÉLECTRONIQUE EN CÉRAMIQUE ET PROCÉDÉ DE PRODUCTION DU COMPOSANT ÉLECTRONIQUE EN CÉRAMIQUE

Publication

EP 2544200 A4 20171213 (EN)

Application

EP 11750810 A 20110304

Priority

- JP 2010049457 A 20100305
- JP 2011055061 W 20110304

Abstract (en)

[origin: EP2544200A1] Provided is a ceramic electronic component including a magnetic body part 2 composed of a ferrite material and a conductive part 3 containing Cu as its main constituent, the magnetic body part 2 containing trivalent Fe and divalent elements including at least divalent Ni, and the content of the Fe being 20 to 48% in molar ratio in terms of Fe 2 O 3 . The magnetic body part 2 contains Mn in such a way that the ratio of Mn to the total of Fe and Mn is less than 50% in molar ratio each in terms of Mn 2 O 3 and Fe 2 O 3 . The magnetic body part 2 and the conductive part 3 are obtained by co-firing in an atmosphere at a pressure equal to or lower than the equilibrium oxygen partial pressure of Cu-Cu 2 O. Thus, even in the case of co-firing the conductive part 3 containing Cu as its main constituent with the magnetic body part 2, insulating performance can be ensured, and favorable electrical characteristics can be achieved.

IPC 8 full level

C04B 35/30 (2006.01); **H01F 1/34** (2006.01); **H01F 17/00** (2006.01)

CPC (source: EP KR US)

B32B 15/20 (2013.01 - US); **B32B 18/00** (2013.01 - US); **B32B 37/06** (2013.01 - US); **C04B 35/26** (2013.01 - KR); **C04B 35/265** (2013.01 - EP US); **H01F 1/34** (2013.01 - KR); **H01F 1/344** (2013.01 - EP US); **H01F 17/00** (2013.01 - KR); **H01F 17/0013** (2013.01 - EP US); **H01F 17/04** (2013.01 - EP US); **H01F 27/2804** (2013.01 - US); **H01F 27/323** (2013.01 - US); **H01F 41/041** (2013.01 - US); **H01F 41/122** (2013.01 - US); B32B 2457/00 (2013.01 - US); C04B 2235/3262 (2013.01 - EP US); C04B 2235/3265 (2013.01 - US); C04B 2235/3279 (2013.01 - EP US); C04B 2235/3281 (2013.01 - EP US); C04B 2235/3284 (2013.01 - EP US); C04B 2235/6025 (2013.01 - EP US); C04B 2235/652 (2013.01 - EP US); C04B 2235/6582 (2013.01 - EP US); C04B 2235/6583 (2013.01 - US); C04B 2235/6584 (2013.01 - EP US); C04B 2237/68 (2013.01 - EP US); H01F 2027/2809 (2013.01 - US)

Citation (search report)

- [X] DE 10055634 A1 20010531 - MURATA MANUFACTURING CO [JP]
- [XI] JP H05326242 A 19931210 - TDK CORP
- [I] JP 2010018482 A 20100128 - TDK CORP
- [A] EP 1770074 A2 20070404 - TDK CORP [JP]
- See references of WO 2011108701A1

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US10236104B2; WO2016041766A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2544200 A1 20130109; **EP 2544200 A4 20171213**; **EP 2544200 B1 20200826**; CN 102792395 A 20121121; CN 102792395 B 20160706; JP 2014179621 A 20140925; JP 5556880 B2 20140723; JP 5979609 B2 20160824; JP WO2011108701 A1 20130627; KR 101475129 B1 20141222; KR 101673727 B1 20161107; KR 20120123540 A 20121108; KR 20140078715 A 20140625; US 2012326828 A1 20121227; US 2017140871 A1 20170518; US 9595377 B2 20170314; US 9741489 B2 20170822; WO 2011108701 A1 20110909

DOCDB simple family (application)

EP 11750810 A 20110304; CN 201180012470 A 20110304; JP 2011055061 W 20110304; JP 2012503285 A 20110304; JP 2014070896 A 20140331; KR 20127023151 A 20110304; KR 20147011774 A 20110304; US 201213602812 A 20120904; US 201715419003 A 20170130